

# **PARALLEL FIBER-FAN-OUT OPTICAL INTERCONNECT FOR FIBER OPTIC SYSTEM**

## **ABSTRACT**

- [31] A fiber ribbon includes a plurality of first segments of optical fibers that extend in a planar side-by-side arrangement having a first predetermined pitch. A fiber-fan-out including a plurality of second segments of the optical fibers extends in a diverging arrangement from the fiber ribbon. A fiber holder extends across the plurality of second segments of the optical fibers for maintaining a plurality of terminal portions of the second segments in a second predetermined pitch that is greater than the first predetermined pitch so that the terminal portions can each be optically coupled to a corresponding optical subassembly (OSA) of a plurality of OSAs arranged in a linear array. An alternate embodiment uses a second fiber holder in place of the fiber ribbon. The holders can be replaced with a common housing assembly spanning all but the terminal portions of the optical fibers.